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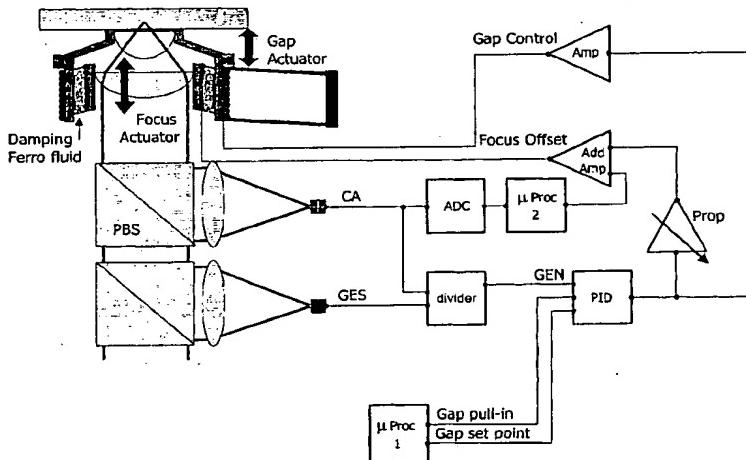
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(54) Title: OPTICAL DATA STORAGE SYSTEM AND METHOD OF OPTICAL RECORDING AND/OR READING



(57) Abstract: An optical data storage system for recording and/or reading, using a radiation beam having a wavelength X is described. The radiation beam is focused onto a data storage layer of an optical data storage medium. The medium has a cover layer that is transparent to the focused radiation beam. The cover layer has a thickness h smaller than 5 µm. A cover layer with thickness variation of substantially less than the focal depth, i.e. 50 nm, eliminates the need of dynamic focus control of the objective which is otherwise required in addition to the gap servo. Further a method of optical recording is described using such an optical data storage system by which a static focus control and spherical aberration correction to accommodate medium-to-medium variance is achieved. The static focus control can be realised by optimising the modulation depth of a known signal, e.g. from a lead-in track.

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